

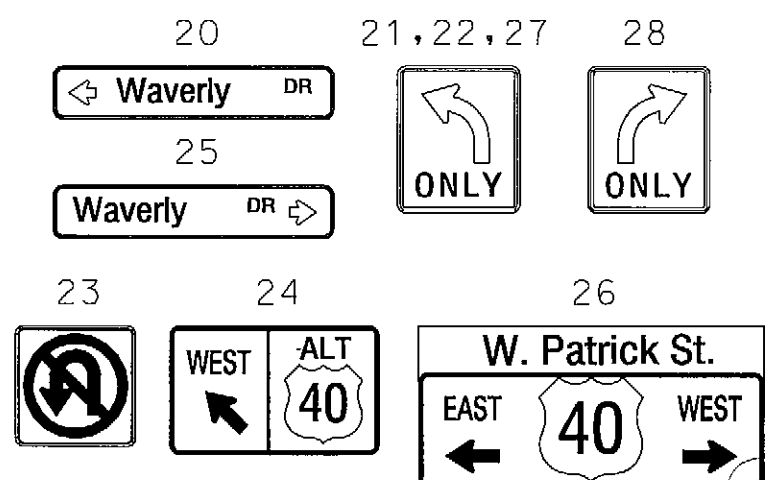
BY: syoung2



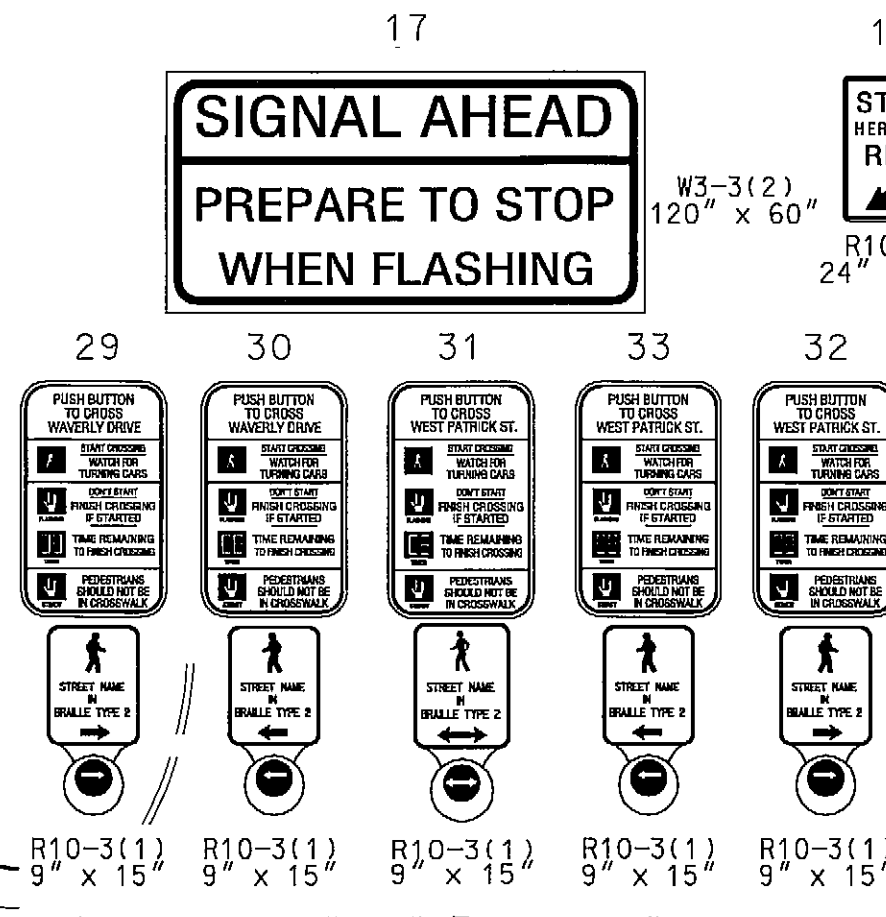
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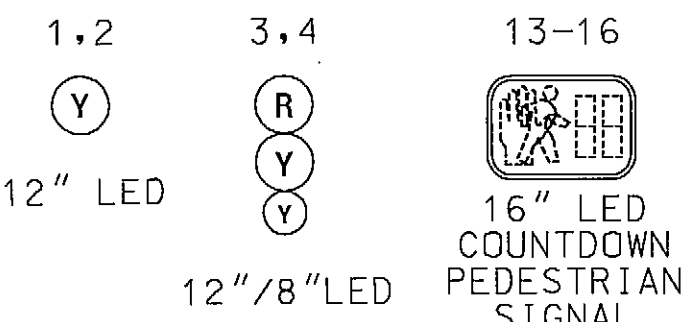
EXISTING SIGNS



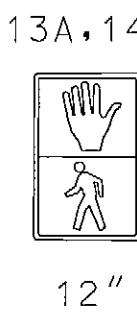
PROPOSED SIGNS



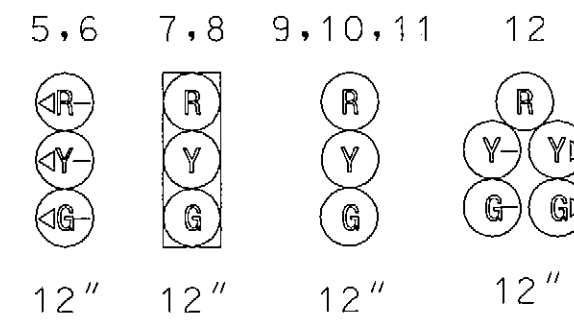
PROPOSED SIGNALS



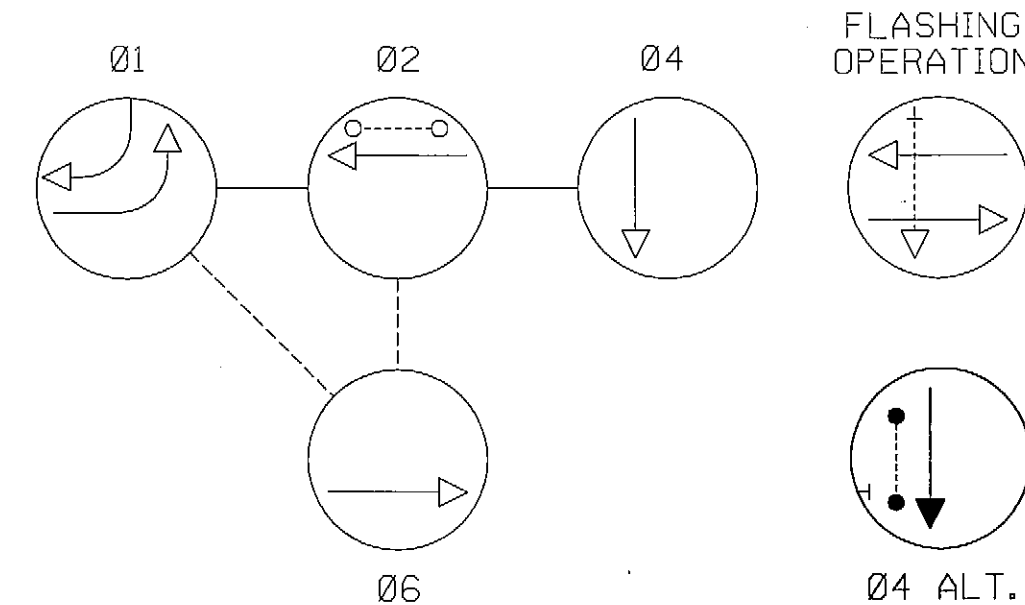
EXISTING SIGNALS TO BE REMOVED



EXISTING SIGNALS

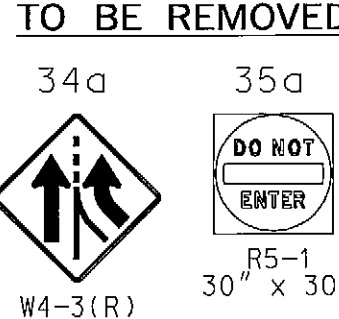


NEMA PHASING

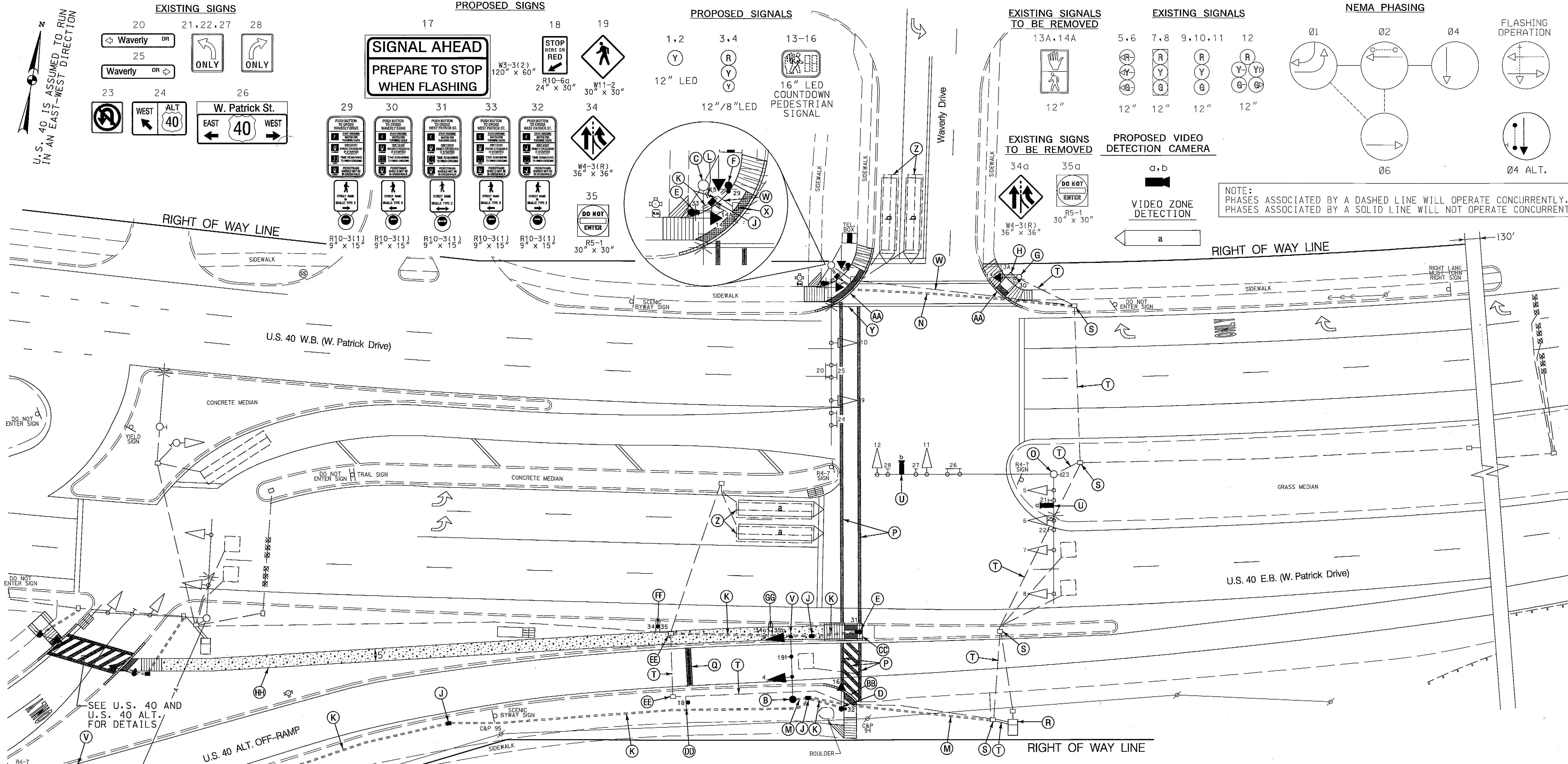
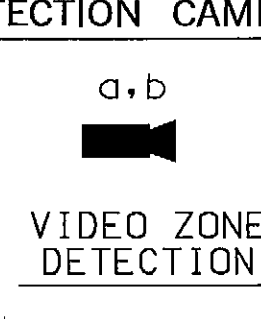


NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

EXISTING SIGNS TO BE REMOVED



PROPOSED VIDEO DETECTION CAMERA



CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A 60 FT. (CUT TO 25 FT.) MAST ARM, TRAFFIC SIGNAL HEADS AND SIGN. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A 38 FT. (CUT TO 25 FT.) MAST ARM, TRAFFIC SIGNAL HEADS AND SIGN. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
- USE EXISTING STEEL POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS.
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE. COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT, R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WEST PATRICK ST."). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801-01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WEST PATRICK ST."). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
- INSTALL CONCRETE FOUNDATION WITH 10 FT. STEEL PEDESTAL POLE (CUT TO 5 FT.) WITH MODIFIED BREAKAWAY BASE STANDARD NO. MD 801-01-01, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WAVERLY DRIVE"). (INSTALL 1-3 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
- USE EXISTING STEEL POLE. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WAVERLY DRIVE").
- INSTALL 5 IN. CONCRETE SIDEWALK.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. CONDUIT SHALL TIE INTO EXISTING 3 INCH BEND IN POLE BASE.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
- USE EXISTING STEEL POLE.
- INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
- INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- USE EXISTING BASE MOUNTED CONTROLLER AND CABINET. INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT. (NOTE: SHA FORCES SHALL RETROFIT CONTROLLER EQUIPMENT TO OPERATE VIDEO DETECTION EQUIPMENT).
- USE EXISTING HANDHOLE.
- USE EXISTING CONDUIT.
- INSTALL OVERHEAD VIDEO DETECTION CAMERA ON EXISTING MAST ARM AS SHOWN.
- CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
- CAP AND ABANDON EXISTING CONDUIT.
- REMOVE EXISTING HANDHOLE.
- REMOVE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS.
- ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
- INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.12) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40). SEE SHEET TSP-4 FOR RAMP DETAILS.
- INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.11) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40). SEE SHEET TSP-4 FOR RAMP DETAILS.
- INSTALL SIDEWALK RAMP (STANDARD NO. MD 655.21) AND DETECTABLE WARNING SURFACE (STANDARD NO. MD 655.40). SEE SHEET TSP-4 FOR RAMP DETAILS.
- INSTALL R10-6a SIGN ON ONE 4 IN. x 4 IN. TREATED WOOD POST.
- USE EXISTING HANDHOLE AND ADJUST TO FINAL GRADE.
- INSTALL PROPOSED SIGNS ON ONE 4 INCH X 6 INCH WOOD SIGN SUPPORT (11' = 18 L.F.).
- REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORT.
- INSTALL 5 IN. CONCRETE SIDEWALK.

GENERAL NOTES

- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL CONTACT SHA TO SCHEDULE RETROFITTING OF THE CONTROLLER EQUIPMENT IN ORDER TO OPERATE VIDEO DETECTION EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLES.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
- REFER TO SHEET 3 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

U.S. 40 (Patrick Street) and

Waverly Drive

TRAFFIC SIGNALIZATION PLAN

SCALE 1" = 20' ADVERTISED DATE 2/16/73 CONTRACT NO. FR360ASP/65F

DESIGNED BY COUNTY Frederick
DRAWN BY M. Linardi LOGMILE 10004011.73
CHECKED BY TIMS NO. 1760
F.A.P. NO. TOD NO.

TS NO. 867B DRAWING TSP-1 OF 5 SHEET NO. 1 OF 5

PLOTTED: Thursday, July 30, 2009 AT 09:11 AM
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